

L 19185-63 EWT(d)/EWP(k)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pf-4 JD/HW/JG
ACCESSION NR: AR3004206 S/0276/63/000/005/v053/v053 69
67

SOURCE: RZh. Tekhnologiya mashinostroyeniya, Abs. 5V279

AUTHOR: Stukach, A. G.; Orlov, S. N.; Baranchikov, V. M.

TITLE: Temperature-velocity factor while pressing aluminum alloys

CITED SOURCE: Tr. N.-i i proyektno-konstrukt. in-ta gorn. i obogetit. mashinostr.,
sb. 2, 1960 (1961), 113-133

TOPIC TAGS: pressing aluminum alloy, temperature-velocity factor, drawing degree,
pressed rod, duralumin, crack

TRANSLATION: Factors influencing thermal effect of deformation were investigated.
A method of approximate calculation of thermal effect while pressing aluminum
alloys is presented. Test methods are described for determining the effect of the
degree of drawing on the thermal effect of deformation, temperature of the pressed
billet and the container and the pressure speed during hot pressing of F-1 duralu-
min. Tests were carried out on a 1,000 t hydraulic press. Diameter of the con-
tainer bushing was 115 mm. The drawing degree (ratio of cross section area of
initial bar to the cross section area of the pressed product) was 10.2, 30 and 46.

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ACCESSION NR: AR3004208

2

During tests the following were recorded: the force of pressing per move, surface temperature of the pressed rod at its exit from the matrix eye, and of the matrix temperature. Study of the quality of the pressed rods and analysis of their microstructure were also carried out. It was established that during pressing aluminum alloys of "duralumin" type the thermal effect is very high and may cause a 100° and more warming up of metal. At increasing speed of pressing the temperature of the metal piece constantly rises then from the front toward the rear end and from the center toward the periphery. Irrespective of pressing conditions (initial alloy temperature, container temperature, elongation degree and deformation speed) cracks on the pressed rod appear at a certain surface temperature of the product (for products made of D-1 and D-16 alloys at 480 to 490°); pressing of rods made of D-1 alloy at high running speeds (of the order of 50 m/min and more) at ordinary conditions leads to overheating of peripheral layers. During this time overheating appears later than cracks on the product. It often accompanies metal cracking but is not its primary cause. Fifteen figures, 2 references. S. Kolesnikov.

DATE ACQ: 21Jun63

SUB CODE: IE, MA

ENCL: 00

Card 2/2

181210
Z/034/61/000/004/005/005
E075/E555

AUTHORS: Orlov, S.N., Stukach, A.G. and Ganago, O.A.

TITLE: Method of Extrusion of Hard Aluminium Alloys and
Other Low-plasticity Metals and Alloys
(Soviet Patent No. 129616, Class 7b, 10, Valid from
June 20, 1959, Published November 5, 1960)

PERIODICAL: Hutmické listy, 1961, No. 4, p. 290

TEXT: In order to increase the forming speed during extrusion of sections, an extrusion die with two zones was used, a compression zone and a sizing zone, which are separated by a cavity filled with lead, graphite or another substance which has a lubricating effect. This lubricant ensures maintaining in the extrusion blank a state of stress, without producing tensile stresses, and a high surface quality. The idea is demonstrated by a sketch, Fig. 5, where: 1 - the metal to be extruded; 2 - entry (compression) zone; 3 - extrusion die; 4 - sizing zone; 5 - cavity; 6 - lubricant; 7 - infeed of the lubricant; 8 - piston; 9 - rod.

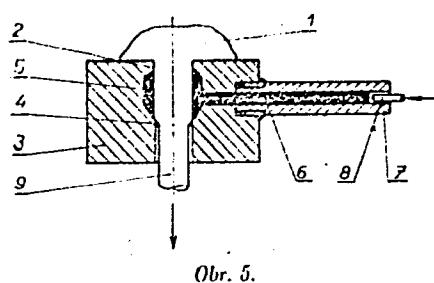
(Abstractor's note: this is a complete translation.)
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89309

Z/034/61/000/004/005/005
E073/E335

Method of Extrusion

Fig. 5:



X

Obr. 5.

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"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8

STUKACH, A.G.

Inverse extrusion method. Trudy Ural. politekh. inst. no.127:
83-95 '61. (MIRA 16:8)

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8"

STUKACH, A. G.; LEKARENKO, Ye. M. [deceased]; ZYKOV, Yu. S.;
POKROVSKAYA, G. N.; BOGOMOLOV, Yu. I.; CHERNYKH, F.P.

Increase in width and the coefficient friction during
the shape rolling of nonferrous metals and alloys.
Tsvet. met. 36 no. 11:65-69 N :63. (MIRA 17:1)

ACCESSION NR: AP4029706

S/0136/64/000/004/0061/0065

AUTHORS: Stukach, A.G.; Lyashkov, V.B.; Lekarenko, Ye.M. (Deceased);
Pokrovskaya, G.N.; Zy*kov, Yu. S.; Cherny*kh, K.P.

TITLE: Deformation resistance During Impact Testing

SOURCE: Tsvetny*ye metally*, no. 4, 1964, 61-65

TOPIC TAGS: deformation resistance, impact test, static test, friction press hot rolling, alloy, copper, brass, zinc, bronze

ABSTRACT: The authors investigated the deformation resistance of "M-1" copper, "TsO" zinc, "N1" nickel, "L62" brass, "BrKD1", "BrOTs4", "BrKMts3-1", "BrB2" and "NMZhMts28-2,5-1,5" bronze and "NKh9" chrome specimens. Impact tests approximated the service conditions during hot rolling. 25 mm long cylindrical specimens with a 20 mm diameter were reduced by 50% at a rate of deformation of 10 m/sec. A 60-ton friction press was used in combination with an electric furnace equipped with a Silite resistor. A study of the hardening diagrams showed that the hardening curves ascend sharply at low temperatures for most of the specimens submitted to increased deformation.

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This shape of the curves is characteristic of high-melting and complex alloys. Low-melting resistant alloys show a peak which falls off as the degree of deformation is increased and deformation resistance declines (zinc, "BrBZ bronze alloy). For "L62" brass and copper the work hardening is eliminated above 700C owing to the high rate of recrystallization. These findings stand in good agreement with the results obtained by other authors. Bronze alloy "BrOts4-3" and "BrKd1" specimens were reduced at a rate of 0.045 m/sec in a series of static tests. This tremendous increase in the rate of deformation resulted in an increased specific pressure and, consequently, the deformation resistance of "BrOts4-3" specimens was tripled. The same dependence was observed in "BrKd1" specimens. The results of static tests showed their unsuitability for the calculation of the industrial processes which occur at high rates of deformation. Changes in the rate of deformation by about 1.5 to 2 times do not affect the deformation resistance. Therefore, the specific pressures obtained at a 10 m/sec rate are applicable to similar rates. The orig. art. has: 3 figures.

Card 2/3

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8

STURACH, V. P., PH.D.

Integrated system for drug transportation by road. Garage No. 9-10
(MIRA 17:10)

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8"

SEMKACHEN, A. A.

**TT.231 (Certain problems in the design of impulse voltage generators) O
nekotorykh voprosakh metodiki rascheta impul'snykh generatorov napravleniya.
SO: Elektrichestvo, (9): 39-45, 1950

Separation of mixtures of ferromagnetic materials
M. A. Netavetay and A. V. Stukachev, USSR
68,384, Apr. 30, 1947. A mixt. of ferromagnetic mate-
rials is heated until one of the components loses its
magnetic properties and the mixt. is then sep'dl. magneti-
cally.
M. Hirsch

STUKACHEV, A. V.

Min.
Mbr., Electrical Ind., -cl949-. Cand. Technical Sci. "One Method of Calculating Non-
Linear Electrical Circuits," Vest. Elektro-Prom, No. 3, 1949; "Method of Calculating
Voltage of Impulse Generators," Elektrichestvo, No. 9, 1950.

3647. A method of calculating non-linear electric circuits. - BRUDACHOV, A. V. Vestn. Elektronika, 30, 16-20 (March, 1949). In Russian. The method is developed for a circuit embodying thyratrons, but may be applied to circuits including other kinds of non-linear resistors, e.g. thermionic valves, iron-coated coils, etc. Special examples treated are the amplitude and current wave-form of a Deion-valve after the flashover of its spark-gap, and the current in the measuring circuit for determining the volt/ampere characteristics of this type of valve. R. P. A.

d 64

APPENDIX METALLURGICAL LITERATURE CLASSIFICATION

STUKACHEV, A. V.

USSR/Electricity - Generators, Impulse High-Voltage Equipment Sep 50

"Method of Calculating Voltage of Impulse Generators," A. V. Stukachev, Cand Tech Sci, Moscow

"Elektrichestvo" No 9, pp 39-45

PA 167T40
Method of calculating discharge conditions for generators of short, very high-voltage pulses. Gives formulas to determine nature of time-voltage variations at peak point of generator and value of damping resistance required to suppress harmful oscillations. Also method of determining parasitic capacitance of generator, numerical values needed for

USSR/Electricity - Generators, Impulse Sep 50
(Contd)

practical use of formulas. Gives calculations to design 8,300,000 v impulse generator.

167T40

167T40

AID P - 2819

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 8/30

Author : Stukachev, A. V., Kand. of Tech. Sci.

Title : Connection scheme for simultaneous testing of apparatus
with surge and normal line voltages..

Periodical : Elektrichestvo, 6, 43-47, Je 1955

Abstract : The author developed a scheme of connections permitting testing of high-voltage equipment for a simultaneous action of surge and line voltages. He describes the principle of operation and the basic elements of the arrangement for the testing of arc-quenching properties of the sparking gaps of valve arresters. The connection diagram permits the regulation of the moment of introduction or the shifting of surge voltage from an auxiliary surge generator within the limits of one half period of the commercial frequency. Two different schemes of connection of the surge generator with the tested

S.TOKACHEV, A.V.

4112. SELECTION OF THE DAMPING RESISTANCE IN THE
DISCHARGE CIRCUIT OF A SURGE GENERATOR
/Elektrichesvo, 1957, No. 1, 57-60, In Russian.
A.V. Smukachev.

An equivalent circuit for surge generator and tested object, with lumped constants and two degrees of freedom, in which the tested object is represented by a capacitor, was found to yield theoretical waveforms in good agreement with experimental oscilograms. The differential equation of the voltage on the tested object is of the 3rd order, its characteristic equation therefore of the 3rd degree. However, the solution of the characteristic equation by Cardan's formula is not only laborious, but also would only serve the purpose of establishing the criterion of an aperiodic discharge (real character of the three roots); the expressions of the roots do not contain the required value of the damping resistance explicitly. The theory of symmetrical functions is used for expanding the coefficients of the differential equation by means of the discriminant. By combining methods of higher algebra with those of numerical analysis the practical problem is solved. The method is supplemented by an estimate of the inherent error, demonstrated on two numerical examples. In the first case the error is 10%, in the second, 27%.

B.F.Kraus

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Rew. along

All-Union Electrotech. Inst. in Lenin

VOSKRESENSKIY, V.V.; STUKACHEV, A.V.

Modeling high-voltage mercury rectifiers by means of thyratrons.
Nauch. dokl. vys. shkoly; energ. no.2:213-218 '58. (MIRA 11:11)

1. Vsesoyuznyy elektrotekhnicheskiy institut imeni Lenina.
(Mercury-arc rectifiers) (Thyratrons)

STUKACHEV, A.V.

110-4-6/25

AUTHOR: Stukachev, A.V., Candidate of Technical Sciences

TITLE: Selection of the Most Advantageous Capacitance of an Impulse Generator (O vybore naivygodneyshchey velichiny rabochey yemkosti generatora impul'sov)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, No. 4,
pp. 18 - 21 (USSR).

ABSTRACT: This article describes a procedure for selecting the most advantageous capacitance of an impulse generator based on the condition of obtaining the maximum coefficient of utilisation when operating with both long and short pulses. The coefficient of utilisation of an impulse generator is defined as the ratio of the amplitude of the voltage on the test object to the sum of the charging voltages of all stages. The coefficient can be expressed in terms of the constants of the equivalent circuit of the impulse generator, shown in the figure. The formula is then derived, and it is explained that actual coefficients of utilisation are 5 - 8% lower than values determined from the formula.

Next, an expression is formulated for the conditions at which the coefficient of utilisation is a maximum. It is shown that, other things being equal, the most advantageous capacitance for an impulse generator working on a 1.5/40 microsecond wave

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Selection of the Most Advantageous Capacitance of an Impulse Generator

should be 2.82 times greater than when working with a 1/5 μ sec. wave. Therefore, in designing impulse generators, the stage capacitance should consist of two identical capacitors which are connected in parallel for operation on a 1.5/40 μ sec. wave and in series for operation on a 1/5 μ sec. wave.

The design of an impulse generator for a rated voltage of 7.2 MV is then considered. Such a generator would be required for testing equipment for a rated voltage of 600 kV. Table 1 shows the rated capacitance and the value of the smoothing resistance appropriate to different values of self-capacitance in the test object. The latter value includes an allowance for the voltage-divider and for stray capacitance. Table 2 gives calculated values of the discharge resistance for different values of the above self-capacitance. Values of the coefficient of utilisation are then calculated for various values of the self-capacitance and displayed in Table 3.

If the working capacitance of the impulse generator is, for example, 15 000 PF, then the procedure given in the article shows that if the pulse length is unchanged, a higher capacitance reduces the coefficient of utilisation by 12 - 15%, on

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Selection of the Most Advantageous Capacitance of an Impulse Generator

an average. With a 1/5 μ sec. wave, the most advantageous value should be 2 980 PF; reconnecting the capacitors of each stage from parallel to series achieves a figure of 2 080 PF, which is much nearer to the best value. If the working capacitance is left at 8 400 PF, the coefficient of utilisation for a 1/5 μ sec. pulse, other things being equal, will be of the order of 0.15.

There are 1 figure, 3 tables and 2 Russian references.

ASSOCIATION: All-Union Electro-technical Institute (Vsesoyuznyy elektrotekhnicheskiy institut)

SUBMITTED: June 24, 1957

AVAILABLE: Library of Congress
Card 3/3

SOV/110-59-9-5/22

AUTHORS: Stukachev, A.V. (Candidate of Technical Sciences) and Lazarev, N.S. (Engineer)

TITLE: Determination of the Commutation Angles of a Multi-phase Rectifier Installation with Allowance for Ohmic Resistance of the Circuit

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 9, pp 16-21(USSR)

ABSTRACT: Most publications on the theory of multi-phase rectifiers ignore the influence of the ohmic resistance of the supply circuit when determining the angle of overlap, and assume that this interval, when two anodes conduct simultaneously, depends only on the reactance. This assumption is good enough for most industrial applications but resistance must be taken into account in some cases. For instance, it is pertinent in analysing the operation of locomotive rectifiers, in multi-phase cascade high-voltage d.c. generators and particularly in constructing models for the experimental study of normal and fault conditions on rectifier installations. In very large rectifier installations the ratio of resistance to reactance in the commutating circuit is very much lower than in small ones; for example, in the Stalingrad-Donbas Transmission System

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SOW/110-59-9-5/22

Determination of the Commutation Angles of a Multi-phase Rectifier
Installation with Allowance for Ohmic Resistance of the Circuit

the ratio is 0.02. It is accordingly important to know the permissible variations in the ratio when constructing models of rectifier installations, and to maintain the overlap angles the same in the original and the model. The process of transition of current from one anode to another is then discussed and expression (1) is derived for the commutating voltage. It is shown that the effect of ohmic resistance in the commutating circuit is to cause ignition to advance by a small angle compared with the case when no resistance is present. This angle is given by Eq (2). Expression (3) is written for the process of increase of commutating currents. It will be noticed that the voltage drop in the valves does not enter into this expression. It was confirmed experimentally that this is the case. After appropriate modifications, expression (5) is derived for the process of commutation and from this the angle of overlap is easily found; see Eq (6). Analysis shows that the short-circuit current consists of a forced and a free component, and the rate of damping of the free component depends on the ratio of resistance to

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SOV/110-59-9-5/22

Determination of the Commutation Angles of a Multi-phase Rectifier
Installation with Allowance for Ohmic Resistance of the Circuit

reactance. Therefore, the amplitude of the forced component, its phase relative to the amplitude of the commutating voltage, and the rate of damping of the free component, are all affected by the ohmic resistance of the control circuit. It is easily calculated that the influence of resistance on the angle of overlap depends upon whether the reactance or the impedance is considered constant. The influence of resistance with reactance constant is represented graphically in Fig 2, and with impedance constant in Fig 3. Curves of current increase in the commutating circuit for various ratios of resistance to reactance are given in Figs 4 and 5. It is mentioned in passing that the variable plotted on the ordinate of these figures is a most important criterion of similarity in modelling rectifiers. A number of tests were carried out to check the validity of Eq (5) and to study the influence of resistance; the results are given in the form of oscillograms in Fig 6. Theoretical curves of the influence of ohmic resistance and the angle of overlap are plotted in Fig 7 and the experimental points which are

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SCV/110-59-9-5/22

Determination of the Commutation Angles of a Multi-phase Rectifier
Installation with Allowance for Ohmic Resistance of the Circuit

included are in very good agreement with them. The influence of resistance on the commutation process in the presence of regulation is also considered in a similar way and Eq (12) is derived. This equation was used to construct the curves given in Fig 3 for the relationship between the angle of overlap and the firing angle for different ratios of resistance to reactance in the commutating circuit. In this graph the bold lines correspond to zero resistance. These curves can be used to determine how much the initial overlap angle should be diminished under inverter conditions, for operation to remain stable. Eq (5) was then further analysed and is shown to refute the usual assumption that if the reactance is zero the two valves conduct separately and the arc is transferred instantaneously from one to the other. It is shown that there is overlap even when the reactance is zero, and the physical meaning of this finding is simply explained. The validity of the explanation of commutation with zero reactance is confirmed by the oscillograms given in Fig 9 which show curves of rise of commutating current for various firing angles in a circuit whose ratio of

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SOV/110-59-9-5/22

Determination of the Commutation Angles of a Multi-phase Rectifier Installation with Allowance for Ohmic Resistance of the Circuit

resistance to reactance is 110. The influence of ohmic resistance in the commutating circuit on the rate of change of anode current at the moment when it falls to zero is also considered. It follows from Eq (16) that the rate of change is inversely proportional to the inductance and directly proportional to the sine of the angle of overlap. The curves given in Fig 10 show the influence of ohmic resistance on the rate of change of anode current. These curves may be used to correct the results of tests on models if the ratio of resistance to reactance in the model is not quite correct. The influence of ohmic resistance in the commutating circuit on the external characteristics of the rectifier, and determination of the boundaries of inverter conditions with allowance for ohmic resistance, will be considered separately.

Card 5/6

STUKACHEV, A.V., kand.tekhn.nauk

Basic principles of modeling multibridge conversion circuits for
direct current transmission. Vest.elektroprom. 31 no.1:
18-21 Ja '60. (MIRA 13:5)
(Electric current converters) (Bridge circuits)

LEBEDEVA, Kapitolina Vladimirovna; STUKACHEV, V.I., dotsent, retsenzent,
red.; MISHARINA, K.D., red. izd-va; MIKHAYLOVA, V.V., tekhn.red.

[Safety engineering in nonferrous metallurgy] Okhrana truda i
tekhnika bezopasnosti v tsvetnoi metallurgii. Moskva, Gos.
nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
(MIRA 12:1)
1958.

1. Moskovskiy inatitut tsvetnykh metallov i zolota im. M.I.
Kalinina (MITSMIZ) (for Stukachev).
(Nonferrous metal industries--Safety measures)

LEBEDEVA, Kapitolina Vladimirovna; STUKACHEV, V.I., dotsent, retsenzent,
red.; MISHARINA, K.D., red. Izd-va; MIKHAYLOVA, V.V., tekhn.red.

[Industrial hygiene and safety techniques in nonferrous
metallurgy] Okhrana truda i tekhnika bezopasnosti v tsvetnoi
metallurgii. Moscow, Gos.nauchno-tekhn.izd-vo lit-ry po
chernoi i tsvetnoi metallurgii, 1958. 306 p. (MIRA 13:1)

1. Moskovskiy institut tsvetnykh metallov i zolota im. M.I.
Kalinina (MITsMIZ) (for Stukachev).
(Nonferrous metal industries--Safety measures)
(Metalworkers--Diseases and hygiene)

DOKUCHALOV, Aleksandr Stepanovich; SOBOLEV, Petr Alekseyevich; RUDNEV,
A.P., otv.red.; STUKACHEV, V.I., dotsent, retsenzent; MISHARINA,
K.D., red.izd-va; ISLENT'YEVA, P.G., tekhn.red.

[Safety techniques in copper smelting and nickel plants] Tekhnika
bezopasnosti na medeplavil'nykh i nikellevykh zavodakh. Moskva,
Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
(MIRA 12:8)
1959. 214 p.

1. Moskovskiy institut tsvetnykh metallov i zolota im. M.I.Kalinina
(for Stukachev).
(Metallurgical plants--Safety measures)

ACC NR: AP6021261

(A,N)

SOURCE CODE: UR/0066/66/000/003/0027/0030

AUTHOR: Koshkin, N. N. (Candidate of technical sciences, Docent); Stukalenko, A. K.

ORG: Leningrad Technological Institute of the Refrigeration Industry (Leningradskiy
tekhnologicheskiy institut kholodil'noy promyshlennosti)

TITLE: Selection of the optimal degree of internal compression for a rotor-type refrigeration compressor

SOURCE: Kholodil'naya tekhnika, no. 3, 1966, 27-30

TOPIC TAGS: compressor design, refrigeration engineering, refrigeration equipment

ABSTRACT: Suggestions for the more efficient and economical operation of rotor-type compressors are presented. Low efficiency in this compressor is due to the disparity in internal and external pressures in various stages of operation. Since the external pressure of the compressor is a function of the water cooling temperature of the system, to improve the efficiency of the compressor it is necessary to improve the quality control of the water cooling system. Orig. art. has: 4 figures, 6 formulas.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 002

UDC: 621.57,041

Card 1/1

ROZENFEL'D, Lev Markovich, prof., doktor tekhn.nauk; TKACHEV, Anatoliy Georgiyevich, prof., doktor tekhn.nauk; GUREVICH, Yevgeniy Semenovich, inzh.; ONOSOVSKIY, V.V., inzh.; SERDAKOV, G.S., inzh.; TSYRLIN, B.L., inzh.; KALNIN', I.M., inzh.; ROMANOVSKIY, N.V., inzh.; YATSUNOV, I.F., inzh.; DANILOVA, G.N., dotsent; MIKHAI'SKAYA, R.N., inzh.; KARNAUKH, M.S., inzh.; STUKALENKO, A.K., inzh.; IL'IN, A.Ya., inzh.; TSIPERSON, A.L., red.; BABICHEVA, V.V., tekhn.red.

[Examples and designs of refrigerating machines and apparatus]
Primery i raschety kholodil'nykh mashin i apparatov. Moskva, Gos. izd-vo torg.lit-ry, 1960. 237 p. [Thermodynamic diagrams of the refrigerants used] Termodinamicheskie diagrammy rabochikh tel kholodil'nykh mashin.
(MIRA 13:9)
(Refrigeration and refrigerating machinery)

GRINSHPUN, O. Ya.; KUCHERENKO, A. Ye., kand. med. nauk; KUCHERENKO, Ye. M.,
kand. med. nauk; STUKALENKO, N. A. (Vinnitsa)

Pathogenesis of varicose veins of the lower extremities. Khirurgia
(MIRA 15:12)
no. 2:55-59 '62.

(VARIX)

STUKAL'ENKO, N.Ye.

New schematic of the control network of an electric bridge crane.
Moscow, truda v prom. R no.10:53-54 O '64. (OIEA 17:11)

I. Gorskii zaved pressov.

L 44108-66 SWP(m)/SWP(j) IJP(c) RM

ACC NR: AP0015654 (A) SOURCE CODE: UR/0413/66/000/009/0008/0069

INVENTOR: Popov, A. V.; Stukalev, G. K.

B

ORG: none

TITLE: Continuous forming of rubber hose with wire spirals. Class 39,
No. 181262 [announced by the Volga Branch, Scientific Research Institute
for the Rubber Industry (Volzhskiy filial Nauchno-issledovatel'skogo
instituta rezinovoy promyshlennosti)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9,
1966, 68-69

TOPIC TAGS: rubber hose, rubber ~~hose forming~~ working machinery, rubber
product

ABSTRACT: This Author Certificate introduces a method in which rubber
hose with wire spirals is formed continuously by pressing the rubber
mixture around the spiral in the head of an extruder on a stationary
pole. To increase the forming rate of the hose and to improve its
quality, the wire spiral is produced with a given pitch and tension of

Card 1/2

UDC: 678.027.3:621.643.33

1. 4111-8

ACC NR: AP6015654

its turns. In the process of pressing, the spiral is continuously moved at a given rate over the pole through the hollow worm stock of the extruder (see Fig. 1). Orig. art. has: 1 figure. [Translation] [LD]

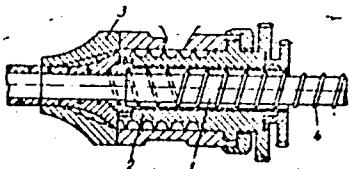


Fig. 1. Forming press for
rubber hose with
spiral wire.
1—Pole; 2—hollow
worm stock;
3—extruder head;
4—wire spiral

SUB CODE: /311/ SUBM DATE: 04Jan65/

Card 2/2

STUKALIN, N.; PLYUSHCHENKOV, L.

Control room improved by a system for synchronizing asynchronous
motors. Muk.-elev.prom.21 no.9:28 S '55. (MLRA 8:12)

1. Smolenskiy mel'nichnyy kombinat
(Electric motors, Induction)

STUKALIN, N. N.

PA 42/49T41

USSR/Engineering
Smelting
Fuel Consumption

Apr 49

"Use of Coke Substitutes for Smelting Pig Iron in
Cupola Furnaces," N. N. Stukalin, Engr., 3 pp

"Za Ekonomiyu Topliva" Vol VI, No 4

Although productivity of the majority of cupola furnaces in maintenance and production foundries does not exceed 5 tons of casting per hour, thousands of tons of coke are used annually. Results of using low-cost fuels (peat, anthracite, and thermoanthracite) as coke substitutes in cupola

USSR/Engineering (Contd)

Apr 49

furnace smelting show that metal smelted in this way has good mechanical characteristics. •

42/49T41

STUKALIN, V.D., inzh.; LUNEV, V.M., mekhanik-naladchik defektoskopov;
PASHUTIN, S.B.; BODROV, V.V.

Letters to the editor. Put' i put.khoz. 5 no.6(6) ja '61.
(MIRA 1418)

1. Astrakhanskaya distantsiya puti Privolzhskoy dorogi (for Stukalin).
2. Stantsiya Astrakhan', Privolzhskoy dorogi (for Lunev). 3. Nachal'nik posta 230-go kilometra Odesskoy dorogi, g. Nikolayev (for Pashutin).
4. Starshiy dorozhnyy master, st. Tikhvin, Oktyabr'skoy dorogi (for Bodrov).

(Railroads)

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8

STUKALINA, G.A.

Stems of crinoids from upper Silurian sediments of the Aksarly Mountains (central Kazakhstan). Inform.sbor.VSEGEI no.42:31-42 '61.
(MIRA 15:1)

(Kazakhstan--Crinoidea, Fossil)

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8"

APROV, T.P.; SIBALINA, G.A.

New data on Silurian sediments in the northern part of the Gorny Altai.
Trudy VSEGI 11:25-29 '64.
(MIRA 18:7)

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8

STEV ALIMA, G.A.

Methods for the study and collection of the fossil remains of *Spirorbis* stema. Trudy VSEGEI 111:31-75 '64. (MFA 1B:7)

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8"

SOV/144-58-11-12/17

AUTHORS: Dorofeyev, B. G. (Senior Lecturer), Meyerovich, Sh. S.
(Candidate Technical Sciences, Docent, Department Head),
Stukalkin, A. N. (Engineer), Kurochka, A. L. (Engineer).

TITLE: Experimental Investigation of the Ventilation of Electric
Locomotive Starting Resistances of a New Type (Eksperimental'-
noye issledovaniye ventilyatsii elektrovoznykh puskovykh
soprotivleniy novogo tipa)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika,
1958, Nr 11, pp 107-111 (USSR)

ABSTRACT: Resistances type KF are used on electric locomotives types
N-8 and VL-23 and others. Previous work has shown that al-
though these metal strip resistors are much better than the
previous cast iron ones, the coils are not uniformly cooled
and there is a temperature difference of 240°C between the
front and back of the element and accordingly the material
is not so fully used as it should be. Accordingly, new types
of resistance have been developed at the Novocherkassk Elect-
ric Locomotive works, and the Novocherkassk Polytechnical
Institute, and the works laboratory has collaborated in testing

Card 1/4

SOV/144-58-11-12/17

Experimental Investigation of the Ventilation of Electric Locomotive Starting Resistances of a New Type

the cooling of such a starting resistance type LF-1. The construction of resistance box type LF-1 is described and illustrated diagrammatically in Fig 1. The comparison between resistances type KF and type LF-1 given in Table 1 shows that the new resistances are smaller, and lighter and use much less insulation than the old though they are of higher power. The new resistances are also of simpler construction than the old. It is required that under operating conditions the local temperature rise of the resistance element surface should not exceed 450°C. In order to make the necessary tests of temperature rise a simple wind-tunnel was constructed, which is described and illustrated diagrammatically in Fig 3. In the tests measurements were made of the air flow, the temperature rise of the resistance elements, the power consumption and the air temperatures at inlet and outlet. The methods of measurement are described. The air speed ranged up to 8.75 m/sec and the current from 98 to 250 A. The test procedure is described. It was found that the heating is much more uniform than in resistances type KF.

Card 2/4

SOV/144-58-11-12/17

Experimental Investigation of the Ventilation of Electric Locomotive Starting Resistances of a New Type

According to conditions the greatest difference between the temperature rise of front and rear surfaces was 60-160°C, and accordingly the power of the resistance could be increased by 34% or the flow of cooling air could be reduced. The relationship between the permissible current and rate of air flow is given in Fig 4. An equation is given for the relationship between the permissible current and the air flow when all nine rows of resistance are in use, with a temperature rise of 450°C. Temperature rises of the different rows of resistances are given in Fig 5 and Fig 6. The temperature distribution could be somewhat improved by

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SOV/144-58-11-12/17

Experimental Investigation of the Ventilation of Electric Locomotive Starting Resistances of a New Type

altering the design of the fixing pins in the centre of the elements. There are 6 figures and 1 Soviet reference.

ASSOCIATIONS: Kafedra teoreticheskikh osnov teplotekhniki Novocherkasskogo politekhnicheskogo instituta; Novocherkasskiy elektrovozostroitel'nyy zavod (Chair of Theory of Fundamentals of Thermal Power Engineering, Novocherkassk Polytechnical Institute, and Novocherkassk Electrical Locomotive Works)

SUBMITTED: July 2, 1958.

Card 4/4

STUKALKIN, Andrey Mikoleyevich; SMIRNOV, Aleksandr Ivanovich; SIFOROV,
N.I., inzh., red.; BOBROVA, Ye.N., tekhn. red.

[Pantographs for electric locomotives] Pantografy elektricheskih lokomotivov. Moskva, Transzheldorizdat, 1962. 77 p.
(MIRA 15:9)

(Electric locomotives)

KOSTYAKOV, V.A.; STUKAL'KIN, A.N.; SAVKOVA, N.N.

Contactless revelation relay. Sber. nauch. trud. EINII 2:186-
195 '62.
(MIRA 16:8)

(Electric relays)
(Electric locomotives—Brakes)

STUKALKIN, A.N.; NOVOGRENKO, N.M.

Electromagnetic relay with a $0,9 \pm 0,95$ resetting ratio. Sber.
nauch. trud. EINII 2:249-251 '62. (MIRA 16:8)

(Electric relays)

NIKITENKO, Aleksandr Girgor'yevich, starshiy prepodavatel'; STUKALKIN,
Androy Nikolayevich; TREMPOLETS, Viktor Vasil'yevich, starshiy
nauchnyy sotrudnik; BATUR0, Vitaliy Ivancovich, assisient

Mechanical vibrations of the contactors of electrical devices.
Izv.vys.ucheb.zav.; elekromekh. 5 no.3:308-314 '62. (MIRA 15:4)

1. Kafedra elektricheskikh mashin, apparatov, matematicheskikh i schetno-reshayushchikh priborov i ustroystv Novocherkasskogo politekhnicheskogo instituta (for Nikitenko, Baturo). 2. Nachal'nik laboratorii kommutatsionnoy apparatury Novocherkasskogo nauchno-issledovatel'skogo instituta elektrovozostroyeniya (for Stukalkin).
3. Novocherkasskiy nauchno-issledovatel'skiy institut elektrovozostroyeniya (for Trempolets).

(Electric contactors---Vibration)

STUKALKIN, A.N.; MAVDRIKOV, F.I.; ANDRYUSHCHENKO, N.I.; TREMPOLETS, V.V.

Main controller for a.c. locomotives with low-voltage regulation.
Sbor. nauch. trud. ElNII 3:124-131 '63. (MIRA 17:4)

KAS'YANOV, V.A.; STUKALKIN, A.N.

Results of testing a P-7 pantograph. Sbor. nauch. trud. Elnii 3:
214-217 '63. (MIRA 17:4)

SMIRNOV, Aleksandr Ivanovich; STUKALKIN, Andrey Nikolayevich;
PETUSHKOVA, I.K., red.

[Resistances in the electrical circuits of electric loco-
motives] Soprotivleniya v elektricheskikh tsepiakh elektro-
vozov. Moskva, Transport, 1965. 73 p. (MIRA 18:3)

ALIKIN, R.I.; GORIYENKO, I.I.; BESPROZVANNIY, I.G.; THIBISCU, P.P.;
ZOLOTAREV, P.A.; ZUSMAN VSKAYA, L.L.; IBRAGIMOV, K.G.; KOTOREZOV,
M.A.; KOKOREV, A.I.; KUPRIANOV, Yu.V.; KUPOCHKA, A.L., kand.
tekhn. nauk; LITVINCOVA, I.M.; LOZANOVSKIY, A.L., kand. tekhn.
nauk; MAVRIKOV, F.I.; MAKHAN'KOV, L.V.; PUKALOV, V.I.; RAYLYAN,
A.F.; SVERDLOV, V.Ya.; SKLYAPOV, B.S.; SOLOV'YEV, K.M., kand.
tekhn. nauk; STUKALKIN, A.N.; SUROVIKOV, A.A.; TIKHONOV, N.G.;
SHTEFENKO, P.K.; YANOV, V.P.

[V180 electric locomotive.] Electrovoza VAFO. Novocherkassk. Nauchno-
issledovatel'skii institut elektrovozostroeniia. Sbornik nauchnykh
trudov, vol. 5) (MIRA 18:5)

Abstract of the article:

Method of measuring twisting stresses in structural elements by means of magnetic measurement elements and instruments.

SOURCE: Ref. Inf. Mat. Materialien und Ressourcen der DDR, Berlin, 1980, S. 6.175

REF ID: A91000100. Author: Dr. Vier, H.-J. A (MAX-PLANCK-INSTITUT FÜR PHYSIK UND ASTROPHYSIK, NO. 6, 1980), B-2-344

TOPIC CODE: torsion stresses, torque, electric measurement, ferromagnetic material

ABSTRACT: The article gives the operating principle and basic advantages of a device for measuring twisting stresses and torque in structural elements and materials. The working element of the device is a measurement coil (winding) with an electrical instrument. The instrument may be used for measuring twisting stresses of material in a complex stressed state. [Translation of abstract]

CODE CITE: V3 . 11

DDC: 620.175

Card 2/178

STUKALO, A.P.

Geological structure and coal-bearing possibilities of the
Dnieper Carboniferous region in the western sector of the
greater Donets Basin. Trudy Lab.geol.ugl. no.6:311-318 '56.
(MLRA 10:2)

1. Ukrainskoye geologicheskoye upravleniye.
(Donets Basin--Coal geology)

STUKALO, I. T.

Selection of pulmonary tuberculous patients for climatic sanatoria
of northern Caucasus. Sovet. med. No. 5, May 50. p. 16-8

1. Krasnodar Krai Scientific-Research Institute for Tuberculosis
(Director--A. L. Samoylovich).

CLNL 19, 5, Nov., 1950

S'NOHALO L. T.

O razviti pav sko > napravljenia v klimatoterapii. [Develop-
ment of Pavlov theory in climatic therapy] Probl. tuberk., Moskva
No. 2 Mar-Apr 1 p. 3-8.

1. Professor. 2. O.I. Krasnodar Scientific-Research Institute
of Tuberculosis (Director--Prof. A. L. Samoilovich) and of
the Tuberculosis Sanatorium at the Main Health Resort Ad-
ministrative Center Golendrovsk (Director--V. Ye. Yazyev).
CIML Vol. 9, No. 10 Oct 1951

LEMISHKO, A.M. STUKALO, I.T., otvetstvennyy red.

[Practical instructions for laboratory examinations in tuberculosis]
Metodicheskie ukazaniia po laboratornym issledovaniiam ozi tuberkuloze. L'vov, 1956. 23 p.
(TUBERCULOSIS) (MIRA 11:3)

BUNINA, B.Z., prof.; DRABKINA, R.O., prof.; KLEBANOVA, A.A., kand. biolog.nauk; KOSMODAMIANSKIY, V.N., prof.; MOISEL', L.M., prof.; RABUKHIN, A.Ye., prof.; STRUKOV, A.I., prof.; STUKALO, I.T., prof.; TIMASHEVA, Ye.D., kand.med.nauk; CHISTOVICH, A.N., prof.; SHMELEV, N.A., prof.; EYNIS, V.L., prof., zasluzhennyy deyatel' nauki, otv. red., red.toma; KORNEV, P.G., prof., red.; KUDRYAVTSEVA, A.I., prof. [deceased], red.; LEBEDEVA, Z.I., kand.med.nauk, red.; LAPINA, A.I., red.; MASSINO, S.V., doktor med.nauk, red.; SHEBANOV, F.V., prof., zasluzhennyy deyatel' nauki, red.; SENCHILO, K.K., tekhn.red.

[Multivolume handbook on tuberculosis] Mnogotomnoe rukovodstvo po tuberkulezu. Moskva, Gos.izd-vo med.lit-ry. Vol.1. [General problems in tuberculosis] Obshchie problemy tuberkuleza. Red. toma: V.L.Einis, A.I.Strukov. 1959. 672 p. (MIRA 13:6)

1. Chlen-korrespondent AMN SSSR (for Strukov, Shmelev). 2. Deystvitel'nyy chlen AMN SSSR (for Kornev).
(TUBERCULOSIS)

STUKALO, I.T., prof.; BORISOV, I.S.

Interval Q-T of the electrocardiogram in the diagnosis of rheumatic diseases of the heart. Vrach. delo no.8:43-45 Ag '60.(MIRA 13:9)

1. Kafedra propedeviticheskoy terapii (zav. - prof. I.T.Stukalo)
pediatricheskogo i sanitarno-gigiyenicheskogo fakul'tetov L'vovskogo
meditsinskogo instituta.
(ELECTROCARDIOGRAPHY) (RHEUMATIC HEART DISEASE)

STUKALO, I.T., prof.; KULACHKOVSKIY, Yu.V., kand.med.nauk;
SHAKHINIDI, F.Ye.

State of the blood circulation system in patients with tubercu-
losis of the lungs; from data of instrumental studies. Probl.
tub. 38 no.7:70-77 '60. (MIRA 14:1)
(TUBERCULOSIS) (BALLISTOCARDIOGRAPHY) (ELECTROCARDIOGRAPHY)

STUKALO, I.T., prof.; KULACHKOVSKIY, Yu.V.; SHAKHINIDI, G.Ye.

Pulmonary heart syndrome in tuberculosis. Probl.tub. 38
no.8:36-45 '60. (MIRA 14:1)

1. Iz kliniki tuberkuleza (sav. - prof. I.T. Stukalo) L'vov-
skogo meditsinskogo instituta (dir. - prof. L.N. Kuzmenko).
(TUBERCULOSIS) (PULMONARY HEART DISEASE)

STUKALO , I.T., prof.

Effect of weather, season and climate on cardiovascular activity.
Nauch.trudy L'vov.obl.terap.ob-va no.1:19-28 '61.

(MIRA 16:5)

1. Kafedra tuberkuleza L'vovskogo meditsinskogo instituta.
(CARDIOVASCULAR SYSTEM) (CLIMATOLOGY, MEDICAL)

STUKALO, I.T., prof.; KULACHKOVSKIY, Yu.V., kand.med.nauk;
SHAKHINIDI, G.Ye.

Norms for the basic elements of electro- and ballistocardiography
of healthy young people residing in the western regions of the
Ukrainian S.S.R. Nauch.trudy L'vov.obl.terap.ob.vra no.1455-61 '61
(MIRA 1635)

1. L'vovskaya oblastnaya klinicheskaya bol'nitsa (glavnnyy vrach -
N.I. Besedin).

(ELECTROCARDIOGRAPHY) (BALLISTOCARDIOGRAPHY)
(UKRAINE-- CARDIOLOGY--RESEARCH)

STUKALO, I.T., prof.

Arterial piezography as a method of characterizing capillary blood circulation. Nauch.trudy L'vov.obl.terap.ob-va no.1:86-95 '61. (MIRA 16:5)

1. Kafedra tuberkuleza L'vovskogo meditsinskogo instituta.
(BLOOD--CIRCULATION) (CAPILLARIES)
(BLOOD PRESSURE)

STUKALO, I.T., prof.; KULACHKOVSKIY, Yu.V., kand.med.nauk; SHAKHINIDI, G.Ye.

Results of a study of arterial pressure and systolic and minute
blood volume in a group of medical students. Vrach. delo 4:125-126
Ap '62. (MIRA 15:5)

1. L'vovskiy meditsinskiy institut.

(BLOOD PRESSURE) (BLOOD VOLUME)

MALOZOVSKIY, Moisey Ioselevich; CHEPELENKO, Konstantin Nikolayevich;
STUKALO, M.P., inzh., retsentent; ONISHCHENKO, N.P., red.

[Mechanics and pattern maker; work practice] Slesar'-les-
kal'shchik; opyt raboty. Moskva, Gos.nauchno-tekhn.izd-vo
mashinostroit.lit-ry, 1960. 184 p. (MIRA 13:7)
(Laying out (Machine-shop practice)) (Gauges)

On a method for the control ...

S/044/62/000/008/040/073
C111/C222

and then the second approximation $U_{p+k+1}^{(2)}$ according to the formula

$$U_{p+k+1}^{(2)} = U_{p+k+1}^{(1)} + h_n \delta_p \nabla^{p+1} f_{p+k+1}^{(1)},$$

and also $f_{p+k+1}^{(2)}$ and $\varphi_{1,2}^{(p+k+1)} = f_{p+k+1}^{(2)} - f_{p+k+1}^{(1)}$. If $|\varphi_{1,2}^{(p+k+1)}| \leq \varepsilon$,

where δ is a given small positive number, then one passes over to point 4), otherwise to point 3).

3) According to the scheme

$$U_{p+k+1}^{(r)} = U_{p+k}^{(r-1)} + h_n \gamma_p \varphi_{r-2,r-1}^{(p+k+1)} \quad (r = 3, 4, \dots, i);$$

$$\varphi_{r-2,r-1}^{(p+k+1)} = f_{p+k+1}^{(r-1)} - f_{p+k+1}^{(r-2)}.$$

the further approximations $U_{p+k+1}^{(r)}$ in the node $p+k+1$ ($r = 3, \dots, i$) are calculated; furthermore $f_{p+k+1}^{(r)}$ and $\varphi_{r-1,r}^{(p+k+1)}$ until the inequality

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On a method for the control ...

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C111/C222

$|\varphi_{i-1,i}^{p+k+1}| \leq \varepsilon$ holds for one i . Then one passes over to point 4).

4) $f^{(i)}$ and the left differences for this magnitude are calculated up to order p , inclusively. If then $t_{p+k+1} \leq T$, then the solution is sought, according to point 1), in the following $p+k+2$ node ; if $t_{p+k+1} > T$, then the problem is solved.

The author writes the extrapolation and interpolation formulas of the Adams method in the form

$$U_{p+k+1} = U_{p+k} + h_n \sum_{p=0}^P a_{hp} f_{p+k-p},$$

$$U_{p+k+1} = U_{p+k} + h_n \sum_{p=0}^P a_{pp} f_{p+k+1-p},$$

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On a method for the control ...

S/044/62/000/008/040/073
C111/C222

and for the calculation of the coefficients a_{pq} and a'_{pq} he gives the following formulas

$$a_{pq} = (-1)^p \sum_{l=p}^p C_l^p Y_l.$$

$$a'_{pq} = (-1)^p \sum_{l=p}^p C_l^p Y_l'.$$

The values of a_{pq} and a'_{pq} for $p = 1, 2, \dots, 9$ are given. The described control method has been programmed on the electronic computer "Kiyev".
Abstracter's note : Complete translation.

Card 5/5

L 34127-66 EWT(1)/EWT(m)/EWF(j) RO/RM
ACC NR: AP6025540

SOURCE CODE: UR/0079/66/036/001/0162/0163

AUTHOR: Ivanova, Zh. M.; Liptuga, N. I.; Stukalo, Ye. A.; Derkach, G. I.

32

ORG: Institute of Organic chemistry, AN UkrSSR (Institut organicheskoy khimii
AN UkrSSR)

B

TITLE: Isothiocyanates of alkyl esters of methylphosphonic acid^b and their derivatives

SOURCE: Zhurnal obshchey khimii, v. 36, no. 1, 1966, 162-163

TOPIC TAGS: ester, phosphate, phosphorylation, chlorination reaction rate,
chemical synthesis

ABSTRACT: Chlorides of alkyl esters of methylphosphonic acid, like dialkyl chlorophosphates, react with potassium thiocyanate to form isothiocyanates of alkyl esters of methylphosphonic acids. These isothiocyanates may be chlorinated to yield dichlorides of monoalkylmonomethylphosphonylimidocarbonic acid. Both series of reaction products react vigorously with alcohols, phenols, ammonia and amines to form the corresponding phosphorylated derivatives of thioureas and iminocarboxylic acid. Four isothiocyanates and two dichlorides were synthesized and characterized. Orig. art. has: 1 table. [JPRS: 35,998]

SUB CODE: 07 / SUBM DATE: 12Jul65 / ORIG REF: 002

Card 1/1 Do

0016 0921

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8

Stukalo, Z. I.; Bogoslavskiy, R. V. (Prof.); Belik, I. E.--Stalino

"Analysis of the Mortality in Burn Disease."

report submitted for the 27th Congress of Surgeons of the USSR, Moscow, 23-28 May
1960.

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8"

STUKALO, Z.I.; TOPUZOV, V.S.

Analysis of postoperative mortality in radical operations on gastric cancer. Klin. khir. no.1:15-19 '65.

(MIRA 18:8)

1. Donetskiy oblastnoy otdel zdravookhraneniya (glavnyy khirurg - Z.I.Stukalo) i Donetskiy oblastnoy onkologicheskiy dispanser (zav. khirurgicheskim otdeleniyem - V.S.Topuzov).

STUKALOV, A., inzhener.

Drawing out steel grooves. Stroitel' no.3:15 Mr '57. (MLRA 10:4)
(Sheet piling)

STUKALO, A. I.

GANGRENE

Iridocyclitis due to gengrene of a tooth. Vest.oft. 31 no. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

STUKALOV, A. I.

Sheep Shearing

How we sheared 21,607 sheep in one year with a single electric shearing assembly.
Dost. sel'khoz. no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1958, Uncl.
2

STUKALOV, A. I.

Stukalov, A. I. -- "On the Dynamic Stresses Arising in the Presence of Continuous Braking of Trains." Leningrad Order of Lenin Inst of Engineers of Railroad Transport imeni V. N. Obraztsov, Leningrad, 1955 (Dissertation for the Degree of Candidate of Technical Sciences)

Su: Knizhnaya Letopis', No. 24, Moscow, Jun 55, pp 91-104

SOV/124-57-7-7579

Translation from: Referativnyy zhurnal. Mekhanika, 1957 Nr 7, p 17 (USSR)

AUTHOR: Stukalov, A. I.

TITLE: On the Influence Exerted by the Rate of Increase of the Braking Force
on the Longitudinal Forces Present in a Railroad Train (O vliyanii
skorosti narastaniya tormoznoy sily na prodochnyye usiliya v poyezde)

PERIODICAL: Tr. Dnepropetr. in-ta inzh. zh.-d. transp., 1956, Nr 25, pp 51-66

ABSTRACT: As a schematic equivalent for calculation purposes a homogeneous viscoelastic rod weighted at the rear end is used. A braking force applied to the front end of the rod spreads through the body of the rod at a constant speed, it being assumed that at any section of the rod this force will increase exponentially. The values of the generalized coordinates are arrived at by using the operator method to solve the well-known differential equations. A formula is obtained for calculating the braking stresses that arise in a train's coupling gear. From the example which the author adduces it is evident that braking stresses produced in the manner described in this paper are bound to be less than those produced when the braking-force increment is instantaneous.

K. S. Kolesnikov

Card 1/1

ACC N.R. AP7010631

SOURCE CODE: UR/0089/66/021/003/0192/0197

AUTHOR: Selezenskiy, V. F.; Runchenko, V. V.; Royenko, N. M.; Molomiyets, L. D. (Deceased); Stukalov, A. I.

ORG: none

TITLE: Texture distribution along cross section of alpha-and gamma-deformed and quenched uranium rods

SOURCE: Atomnaya energiya, v. 21, no. 3, 1966, 192-197

TOPIC TAGS: x ray analysis, uranium, uranium property, particle cross section, nuclear section

SUB CODE: 11,07,18

ABSTRACT: Roentgenographic analysis of texture distribution along the cross section of α - and γ -deformed and β - and γ -phase quenched uranium rods showed that the distribution density of P poles (hkl) and G_x growth index were functions of mechanical and thermal treatments. Orig. art. has: 6 figures.
EW

Card 1/1

UDC: 548.735:621.339.543.4

112-2-2672

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957, Nr 2,
p. 8 (USSR)

AUTHOR: Stukalov, A.I.

TITLE: Electric Analog Computation of Axial Stresses in a Train
Caused by Braking (Elektricheskoye modelirovaniye
prodol'nykh usiliy v poyezde, voznikayushchikh
vsledstviye tormozheniya)

PERIODICAL: Tr. Dnepropetr. in-ta inzh. zh.-d. transp., 1956, Nr 25,
pp. 172-183

ABSTRACT: The principles of electric analog computation of axial
stresses in a train during the braking operation are given.
The train is analogued like an elastic viscous rod. Each
wagon of the train is represented in the electrical circuit
as an R, L, C. cell. When the wagons are identical the

Card 1/2

112-2-2672

Electric Analog Computation of Axial Stresses in a Train Caused by
Braking (Cont.)

parameters of the cells are identical. In the opposite case they are different. During train braking, the brakes on the individual wagons enter into operation successively one after the other. This fact is taken into account in the equivalent circuit by inserting additional capacities. A special mechanical commutator is employed for sequential voltage pulsing to the sections of the equivalent circuit. An example is given of the design of the equivalent circuit elements from the mechanical parameters specified for the train wagons. The results of the experiments are given.

L.A.B.

ASSOCIATION: Six bibliographic entries.

Card 2/2

ACCESSION NR: AP4029694

S/0089/64/016/004/0325/0332

AUTHORS: Ivanov, V.Ye.; Zelenskiy, V.F.; Stukalov, A.I.; Azarenko, A.V.; Tybrina, L.V.; Gordiyenko, Ya.I.; Kunchenko, V.V.

TITLE: The relationship between the texture of hardened uranium and the type of heating and other aspects of heat treatment.

SOURCE: Atomnaya energiya, v.16, no.4, 1964, 325-332

TOPIC TAGS: phase recrystallization, heat treatment, uranium treatment, polymorphic transformation, multiple hardening, beta phase, alpha phase, phase transformation, annealed uranium, linear expansion, slow cooling, diffusion conversion.

ABSTRACT: It has now been established that the radiative growth of uranium is largely determined by the nature and prominent features of its texture. An attempt has been made to destroy the uranium texture resulting from a single hardening process by subjecting it to several such processes (up to 4 times). The result was a pulverization of the grain and disappearance of the texture, although the authors claim that the latter requires additional verification. Opinions vary as to

Card 1/2

ACCESSION NR: AP4029694

the best method of hardening uranium with a view to limiting its increasing radiation. The tests made in this connection included hardening the uranium samples in the beta- and gamma-phases, followed by the slow-cooling and water-cooling methods. The test results indicate that the texture of hardened uranium is determined primarily by the parameters of the heat treatment of the metal, and the following conclusions are therefore justified: 1) the texture of hardened uranium depends on the nature of the heat treatment but primarily on the duration of exposure to high-temperature phases; 2) the greatest destruction of the texture was noted in the samples that had been heat-treated under the effect of tensions produced by thermic gradients or external efforts, and 3) in the case of low and moderate heating speeds, the texture of hardened uranium is determined to a large extent by the technology of the uranium production and the duration of its exposure in the beta-phase before the hardening. Orig. art. has: 9 figures.

ASSOCIATION: None

SUBMITTED: 30May63

SUB CODE: PH, NS

DATE ACQ: 01May64

ENCL: 00

NR REF Sov: 015

OTHER: 005

Cord 2/2

L 52260-65 EFF(n)-2/EPA(s)-2/EMT(m)/EWA(c)/EWP(b)/T/EMP(t) Pu-4 IJP(c) ES/
WW/DM/JD/JG UR/0089/65/018/004/0357/0361³⁵₈

ACCESSION NR: AP5012470

AUTHOR: Ivanov, V. Ye.; Zelenskiy, V. F.; Kunchenko, V. V.; Royenko, N. M.; Stukalov, A. I.; Vorob'yev, M. A.; Azarenko, A. V.

TITLE: Relation between texture and radiative growth in uranium rods

SOURCE: Atomnaya energiya, v. 18, no. 4, 1965, 357-361

TOPIC TAGS: reactor fuel element, uranium reactor fuel, reactor fuel texture, radiative growth, fuel element stability

ABSTRACT: The authors analyze the textures produced in uranium during its heat treatment and establish a quantitative connection between the texture and the coefficient of radiative growth in uranium. This research was undertaken in connection with the development of a wire-type fuel element (I. I. Khristenko et al., paper at Second Geneva Conference). The material tested was 99.78-99.80% pure uranium 4 mm in diameter subjected to β -treatment at temperatures of 200-300, 450-470, and 480°C. The texture was investigated by means of x-ray structural and dilatometric analysis. The texture description as related to the anisotropic radiative growth was based on the "growth index" method proposed by E. Strurcken and W. McDonall (J. Nucl. Materials, v. 7, 85, 1962). Curves are plotted of the radiative growth

Card 1/2

L 52260-65

ACCESSION NR: AP5012470

G_i against the growth index GI and are found to be independent of the treatment temperature. The elongation component due to the radiative growth as a result of the texture is calculated and its dependence on temperature is evaluated. An increase in treatment temperature results in a comparatively small increase in elongation, due probably to swelling. A load of 0.25 kg/mm² along the sample axis produced at 470°C an insignificant increase in elongation. It is shown that the average values of the coefficients of linear thermal expansion measured in one direction do not describe the character of texture if the latter is not uniaxial. It is concluded that uranium wire with weakly pronounced texture may be highly sensitive to factors not connected with the initial structure. Orig. art. has: 4 figures. [02]

ASSOCIATION: none

SUBMITTED: 04May64

ENCL: 00

SUB CODE: NP

NO REF SOV: 007

OTHER: 004

ATD PRESS: 4010

Card 2/27/b

PA 31/49T25

STUKALO, I. T.

USSR/Medicine - Penicillin, Therapy
Medicine - Lungs, Diseases

Oct 48

"The Application of Penicillin in Some Cases of
Chronic Pulmonary Diseases," I. T. Stukalo, N. S.
Shel'deshev, Krasnodar Kray Sci Res Tuberculosis
Inst, Krasnodar, 5 pp

"Klin Med" Vol XXVI, No 10

Describes case of bronchoectasia and two cases of
chronic bronchitis in which intratracheal in-
jection of penicillin proved effective.

31/49T25

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8

MANASTYRSKIY, R.Ya.; CHERNOV, V.I.; STUKALO, I.T.; OSNOS, M.L.; MELAMUD, M.Ya.
(Lvov)

Certification for specialists in internal medicine. Vrach.delo no.7:
735 Jl '59. (MIRA 12:12)
(LVOV PROVINCE--MEDICINE--LAWS AND LEGISLATION)

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653620019-8"

L 07454-67 EWT(d)/EWT(1)/EEC(k)-2/EWP(v)/EWP(k)/EWP(k)/EWP(l) IJP(c) BB/CG
 ACC NR: AP6035742 SOURCE CODE: UR/0413/66/000/019/0104/0104

INVENTOR: Galata, O. G.; Koloydenko, A. L.; Stukalov, A. M.; Fudim, Ye. V.

43

ORG: none

TITLE: Pneumatic integrator. Class 42, No. 186772. [announced by the Voronezh Branch of the Experimental Design Office for Automation (Voronezhskiy filial optychno-konstruktorskogo byuro avtomatiki)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 104

TOPIC TAGS: pneumatic device, fluid computer

ABSTRACT: An Author Certificate has been issued for a pneumatic integrator which incorporates a pulsating resistor, pneumatic contacts, pneumatic capacitors, and an output amplifier (see Fig. 1). To improve the integration accuracy of alternating

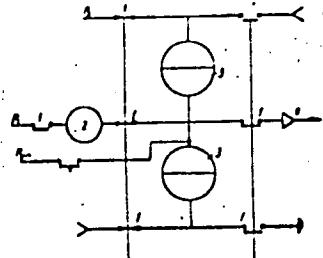


Fig. 1. Pneumatic integrator

1 - Contacts; 2 - pulsating resistor;
 3 - pulsating capacitor; 4 - output amplifier.

Card 1/2 4

UDC: 681.142.07-525

L 07454-67

ACC NR: AP6035742

differences of incoming signals, the normally closed contact (ncc) of the pulsating resistor is connected to one incoming channel, and the normally open contact (nvc) is connected to the working chambers of two pulsating capacitors and by the ncc to the output amplifier. The upper capacitor is connected by the nvc to a second input channel and by the ncc to the power supply channel; the lower capacitor is connected by the nvc to the power supply channel and by the ncc to the exhaust. Orig. art. has: 1 figure.

SUB CODE: 13, 09 / SUBM DATE: 15May64 / ATD PRESS: 5104

Card 2/2 / j.7

SOV/137-57-1-758

Translation from: Referativnyj zhurnal. Metallurgiya, 1957, Nr 1, p 97 (USSR)

AUTHOR: Stukalov, A. N.

TITLE: The Use of Quick-drying Mixtures in the Iron-casting Shop of the Nevskiy Plant im. V. I. Lenin (Primeneniye bystrosokhnushchikh smesey v chugunkiteynom tshekhe Nevskogo zavoda im. V. I. Lenina)

PERIODICAL: V sb.: Povysheniye proizvoditel'nosti truda v liteynom proizv., Moscow-Leningrad, Mashgiz, 1955, pp 139-145

ABSTRACT: The author reports on his experience with the use of core and mold mixtures based on water glass for the manufacture of iron castings weighing up to 4 tons. Some of the molds and cores dry spontaneously in the air. The molds are coated with GB-2 paint or with a shop-mixed paint of the following composition (by weight): Black graphite 1, silver graphite 2, spent sulfite wash (sp. gr. 1.2) 2-2.5. An appreciable increase in labor productivity, an improvement in the quality of the casting, and a better utilization of working areas are achieved.

Ya. M.

Card 1/1

ACC NR: AP6033514

SOURCE CODE: UR/0413/66/000/018/0148/0148

INVENTOR: Grzhimal'skiy, L. L.; Rastorguyev, V. S.; Stukalov, K. I.; Surikov, L. S.

ORG: none

TITLE: A solder for vacuum-tight soldering of stainless steel. Class 49, No. 186262

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 148

TOPIC TAGS: stainless steel, ~~steel~~ soldering, solder, copper base solder, nickel containing solder, tin containing solder, boron containing solder

ABSTRACT: This Author Certificate introduces a solder for vacuum-tight soldering of stainless steel. To improve the quality of joints in multistage soldering of parts, 5% tin and 0.1% boron are added to the solder composition which contains 0.45% nickel and the remainder copper.

SUB CODE: 13/ SUBM DATE: 15Jan65/ ATD PRESS: 5101

Card 1/1 bc

UDC: 621.791.36

ACC NR: AP6033517

SOURCE CODE: UR/0413/66/000/018/0148/0148

INVENTOR: Grzhimal'skiy, L. L.; Stukalov, K. I.; Surikov, L. S.; Tone, E. R.;
Rastorguyev, V. S.

ORG: none

TITLE: Brazing alloy for stainless steel. Class 49, No. 186265

SOURCE: Izrobret prom obraz tov zn, no. 18, 1966, 148

TOPIC TAGS: stainless steel, brazing alloy, nickel containing alloy, silicon containing alloy, copper alloy
*base*ABSTRACT: This Author Certificate introduces a copper-base brazing alloy containing nickel, silicon, and copper. To narrow the range of the alloy melting temperatures, the alloy contains 14—16% nickel and 1.8—2.0% silicon.

SUB CODE: 11, 13 / SUBM DATE: 29Jan65 / ATD PRESS: 5100

Card 1/1

UDC: 621.791.36

STUKALOV, K.V.; GAVRILKEVICH, K.V.; VIRNOVSKIY, A.S., red.

[Low-speed pumping of oil; practices of the Borislavneft' Trust]
Tikhokhodnaisa otkachka zhidkosti; opyt tresta Borislavneft'.
Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry,
1951. 21 p. (MIRA 12:3)
(Oil-well pumps)

Anal. Subject

*U.S. Home Library
N 1/15/52*

4766. CONVERSION OF VZ-300 DIESEL TO NATURAL GAS. Stukalov, K.V.
Sopikov, P.F. and Ivanov, V.A. (Moscow: Gostoptekhizdat, 1951 56pp,
June 1952, 7-9). A scheme for the conversion of an engine used in Soviet oil fields
is described. The work, including alterations to valve timing, can
be done in field workshops. A saving of 73 to 82% of liquid fuel is claimed.

STUKALOV, K.V.; SAL'NIKOV, G., redaktor; VUYEK, M., tekhnicheskiy
redaktor.

[Friendship of petroleum industry workers of Baku and Borislav]
Druzhba neftianiko Baku i Borislava. Kiev, Gos.idz-vo tekhn.
lit-ry USSR, 1954. 30 p. (MLRA 8:8)
(Borislav--Petroleum engineering)
(Baku--Petroleum engineering)

→ Tu KA Loo, Kit!

5(5) FAZI I ROK REPORTU 807/2882

Via sovjeticheskogo poleta vokrug Zemly na territorii USSR dobychi i
vyrobnychi resursi (Problemy v v. 6. l'vov
v maye 1957 g.) Reports on the Exploration and Production of Oil and Gas
in the Ukrainian SSR Presented as a Session of the Scientific Council
of the All-Union Petroleum Scientific Research Institute for Geological
Survey and the All-Union Scientific Research Institute in Kiev, May 1957
Moscow: Gostekhizdat, 1958. 222 s., 100000 naimenovaniy.

卷之三

Ad.: I. G. Baranov, V. V. Gribaldo, and A. S. Shirokova; Institute 2
S. M. Fungus, and A. I. Zaitsevaya; Tchaikovsky
G. G. Dostoevsky

SCOPE: This book is intended for paleobiologists and evolutionary specialists.

SYNOPSIS: This book contains 27 reports originally read at a meeting of the scientific committee of the V.I.G.S. (All-India Petroleum Scientific Research Institute) for Geological Survey, the V.I.G.S. Institute, the V.I.G.S. Institute, the V.I.G.S. Institute, and the V.I.G.S. Institute of Geology. The papers deal with the petroleum geology of the Indian Plate, Chhattisgarh, Orissa, the Andhra-Orissa basin, the northern Black Sea area, and the northern Black Sea area. Particular attention is given to shale oil. Other geological features of those regions most likely to bear oil. The articles discuss oil production techniques and ways of increasing drilling speed in deep wells. References are mentioned.

Zabidzhany, P.-D., Basic Geological Results of the Geophysical Investigations Carried Out in 1956 in the Tengiz-Gudym Depression	165
Zhdanov, I.-I., The State of Oil Production in the Karashagan Oil Industry and Ways of Increasing It	173
Zhdanov, E.-M. and A. A. Lopatin, V. A. Sviridov, General Survey and Analysis of the State of Exploration of the Balkhash Oil Pool	181
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Chernysh, E.-S., Hydrodynamic Methods of Oil Well Testing in the Turkmenian Oil	203
Gavrilov, A. I., General Methods of Activities on Oil Bed in Order to Increase the Production of Petroleum	216
Ovchinnikov, F. A., Results of Oilfield Experience in Theoretical Activating an Oil-bearing Sand and Ways of Further Development of This Method	223
Pogorelski, Ya.-A., Industrial Experience in Separating the Bitumen-Hole Zone by Means of Bitum Hole Ester	230
Pogorelski, Ya.-A., Deeprofertilization of the Bottom Hole Zone of Oil Wells by Means of KPG-2	238
Lesik, I.-S., Experimental Results of Hydromagnetic Prospecting of Deposits in the Oil Industry in the Ural and the Donets Basin	244
Pochinkov, I.-G., Physical Properties and Oil Exploration Practice in Plastered Reservoir Rock (Based on Foreign Sources)	257
Pochinkov, I.-G., Ways of Increasing the Yield of Oil and Gas Well Drilling in the Ukrainian Oil Fields	266
Sokolov, A. I. and G. P. Grishko, Utilization of Local Bentonite in Drilling Oil Wells	277

KOPYTOV, V.F., otv. red.; DAVYDOV, G.I., kand. ekon. nauk, red.; KLIMENT'KO, V.Ya., kand. geol.-miner. nauk, red.; GOREV, N.A., inzh., red.; GORODETSKIY, V.I., inzh., red.; LYASOVSKIY, N.F., inzh., red.; TUMANOV, A.P., inzh., red.; SIUKALOV, K.V., inzh., red.; TITOVA, N.M., red. izd-va; CHUMACHENKO, V.S., red. izd-va; LIBERMAN, T.R., tekhn. red.

[Development of the Ukrainian gas industry]. azvitie gazovoi promyshlennosti Ukrayny. Kiev, Izd-vo Akad. nauk USSR, 1962. 274 p. (MIA 15:11)

1. Akademiya nauk URSS, Kiev. Radz po vychenniu produktyvnykh sil UkrSSR. 2. Chlen-korrespondent Akademii nauk Ukr.SSR i Institut ispol'zovaniya gaza Akademii nauk Ukr. SSR (for Kopytov). 3. Sovet po izucheniyu proizvoditel'nykh sil Ukr. SSR (for Davydev). 4. Institut geologicheskikh nauk Akademii nauk SSR (for Klimenko). 5. Ukrainskoye otdeleniye Gosudarstvennogo instituta po proyektirovaniyu zavodov iskusstvennogo zhidkogo topliva i gaza. (for Gorodetskiy). 6. Gosudarstvennyy planovyy komitet Soveta Ministrov SSSR (for Gorev, Lyasovskiy).

(Ukraine--Gas, Natural)

PIURALOV, M. I., Engr.; MEYEROVICH, I. M., ROKOTIAN, Ye. S., Candidate for Tech. Sci.;
SAKAROV, A. I., Docent; ALEXANDROV, A. A., Prof.; YASHCHENKO, V. A. ,
Engr.; DOLMATOV, F. M., Engr.;

"Investigation of Power and Strength Characteristics of Blooming Mills to
Obtain Maximum Output Capacity," Rolling Mills; Studies, Calculation, Design
and Operation, No. 8, Moscow, Mashgiz, 1956. 258 p.

Articles by Rokotyan, Ye. S., Meyerovich, I. M., and others describe results
of experiments conducted on blooming, cold-rolling, duralumin-dressing,
and car wheel rolling mills.

STUKALOV, M.I.

Potentials for increasing labor productivity in oil production.
Neft.khoz.33 [i.e.34] no.9:1-3 S '56. (MIRA 9:10)
(Petroleum industry)

ARMENIAN
RUDOTYAN, Ye.S., kandidat tekhnicheskikh nauk; MEYEROVICH, I.M., kandidat tekhnicheskikh nauk; ALEKSANDROV, A.A., professor; SAKHAROV, A.I., dotsent; STUKALOV, M.I., inzhener; YASHCHENKO, V.A., inzhener; DOLMATOV, F.M., inzhener.

Improving the performance of blooming mills by determining potentialities in factors of strength and power of the equipment.

[Trudy] TSNIITMASH no.33:134-147 '56. (MLRA 10:9)
(Rolling mills) (Mechanics)